

Attorney Docket No. 57761.000144  
GE Docket No. 03PM-1000  
Application Serial No. 09/776,944

### REMARKS

Claims 1-43 are pending in the application. By this Amendment, the specification and claim 3 are amended. Reconsideration and allowance in view of the foregoing amendments and following remarks are respectfully requested.

The Office Action reflects a filing date of February 14, 2001. In accordance with the Decision on Petition mailed July 25, 2001, the present application is accorded a filing date of October 31, 2000. Applicant requests that the records at the U.S. Patent and Trademark Office be corrected to reflect such filing date.

The Office Action objects to the specification asserting various informalities associated with the network paths. In response to the Examiner's helpful suggestions in the Office Action, the specification has been amended to overcome the objections. It is submitted that the application now satisfies all formal requirements.

A. The Rejection of Claim 3 under 35 U.S.C. §112

The Office Action rejects claim 3 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Claim 3 is hereby amended to overcome the asserted deficiencies. Withdrawal of the pending rejection under 35 U.S.C. §112 is respectfully requested.

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**B. The Rejection of Claims 1, 13, 16-18, 20 and 30**

The Office Action rejects claims 1, 13, 16-18, 20 and 30 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,112,249 to Bader et al. (Bader). This rejection is respectfully traversed.

Claim 1 recites a network, comprising a primary network controller; and a plurality of network devices, wherein each network device is connected to the primary network controller by a respective primary network path; and at least one predetermined primary backup network path connecting each network device with the primary network controller, wherein each predetermined primary backup network path is blocked by the network controller when a corresponding primary network path is active; wherein, when a primary network path between a network device and the primary network controller fails, the primary network controller blocks the failed primary network path and switches to one of the predetermined primary backup network paths.

As illustratively described in Bader, Bader is directed to a method and system of non-disruptively rerouting network communications from a secondary network path to a primary path. In the Abstract, Bader describes methods, systems and computer program products for the reassignment of communications sessions to a primary network communications path from a secondary network communications path are provided, which detect the availability of the primary network communications path and reroute existing transferable communications sessions to the primary network communications path from the secondary network communications path. Bader teaches that non-transferable communications sessions are

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maintained over the secondary network communications path until such non-transferable communications sessions are terminated.

The Office Action references various teachings of Bader in asserting that Bader teaches the claimed invention of claim 1. In particular, the Office Action asserts that Bader teaches wherein each predetermined primary backup network path is blocked by the network controller when a corresponding primary network path is active (lines 50-57 of column 7); and wherein, when a primary network path between a network device and the primary network controller fails, the primary network controller blocks the failed primary network path and switches to one of the predetermined primary backup network paths lines 50-57 of column 7 and blocks 22, 24 and 26 of Fig. 3). These assertions in particular are traversed.

Bader (lines 50-57 of column 7) teaches that upon a failure along the primary communications path (block 22), the network control hardware/software typically will attempt to reactivate the primary communications path one or more times. If these reactivation attempts are unsuccessful, the network control hardware/software then may activate the secondary network communications path (block 24).

It is respectfully submitted that such teaching of Bader teaches away from the features of claim 1. That is, claim 1 recites at least one predetermined primary backup network path connecting each network device with the primary network controller, wherein each predetermined primary backup network path is *blocked* by the network controller when a corresponding primary network path is active; wherein, when a primary network path between a network device and the primary network controller fails, the primary network

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controller *blocks* the failed primary network path and switches to one of the predetermined primary backup network paths.

Bader teaches that in the event of a failure along the primary network communication path, the network control hardware/software attempts to reactivate the primary communications path one or more times, if unsuccessful, the network control then may activate a secondary network communication path. This teaching of Bader is fundamentally different than the claimed features, reciting that the claimed invention *blocks* the secondary network path when the primary network path is active, and in the event of failure of the primary network path, the primary network controller *blocks* the failed primary network path and switches to a secondary network path.

That is, it appears that the Office Action is interpreting the activation and the reactivation, as described by Bader, as somehow teaching the claimed features relating to blocking the secondary network path, i.e., the claimed backup path, and blocking the failed primary network path. Applicant respectfully submits that such interpretation is unsupportable. Bader's activation/reactivation is fundamentally different than the claimed blocking. In short, the Office Action's interpretation essentially leaves claim 1's recitations relating to the blocking meaningless.

Applicant further notes that Bader describes in column 8, lines 5-11, that once the secondary path is activated, the network controller periodically checks the status of the primary network communications path, to determine if that path has been reactivated (block 30). Bader further describes that unless the primary path has been reactivated, the network control

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hardware/software continues to assign all new communications sessions to the secondary network communications path. This teaching of Bader also fails to suggest the features recited in claim 1 including blocking the predetermined primary backup network path and blocking the failed primary network path.

Accordingly, it is respectfully submitted that claim 1 defines patentable subject matter for the reasons set forth above. Further, it is submitted that claim 20 defines patentable subject matter for reasons similar to those set forth with respect to claim 1.

Further, dependent claims 13, 16-18 and 30 define patentable subject matter based on their various dependencies on independent claims 1 and 20, as well as the additional features such dependent claims recite. Withdrawal of the rejection under 35 U.S.C. §102 is respectfully requested.

C. The Rejection of Claims 2, 21, 33-36 and 38-41

The Office Action rejects claims 2, 21, 33-36 and 38-41 under 35 U.S.C. 103(a) as unpatentable over Bader in view of U.S. Patent 3,920,975 to Bass. This rejection is respectfully traversed.

Bass is directed to a remote test and control system for use with a data communications network having primary and back-up facilities that provide full network testing and switching capability, as described in the Abstract of Bass. In particular with respect to independent claims 33 and 38, the Office Action asserts that Bader teaches all of the features of the claimed invention except Bader fails to teach the step of monitoring the status of the primary network path. The Office Action attempts to cure the deficiencies of Bader with the teachings of Bass.

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Specifically, the Office Action asserts that Bass teaches a "remote test and control system of the invention provides remote testing and switching capability for a data communications network having primary and backup facilities through a network controller," (lines 30-33 of column 3). The Office Action asserts that the one of ordinary skill would have recognized that it is quite advantages for the network controller in Bader to periodically test a condition of the backup network paths.

However, it is respectfully submitted that even if it were obvious to somehow combine the teachings of Bader and Bass so as to provide Bader with Bass' capabilities relating to periodic testing, such combination would still fail to teach or suggest the invention of independent claims 33 and 38. That is, Bader fails to teach the claimed features relating to "each predetermined primary backup network path is blocked by the network controller when a corresponding primary network path is active" and "when a primary network path between a network device and the primary network controller fails, the primary network controller blocks the failed primary network path and switches to one of the predetermined primary backup network paths."

Accordingly, it is respectfully submitted that the applied art, either alone or in combination, fails to teach or suggest the features as set forth in claims 33 and 38, as well as claims 1 and 20. Thus, dependent claims 2, 21, 34-36, and 39-41 define patentable subject matter based on their various dependencies on such independent claims, as well as the additional features such dependent claims recite. Withdrawal of the rejection under 35 U.S.C. §103 is respectfully requested.

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**D. The Rejection of Claim 3**

The Office Action rejects claim 3 under 35 U.S.C. 103(a) as unpatentable over Bader in view of U.S. Patent 5,452,115 to Tomioka. This rejection is respectfully traversed.

Tomioka is directed to a data communications network remote test and control system having a primary and back-up facilities that provide full network testing and switching. In particular, Tomioka teaches a communication system comprises a wavelength multiplexing network having a plurality of transmission channels of different wavelengths, a plurality of nodes interconnected by the wavelength multiplexing network for performing data communications with other nodes using time slots into which time on each of the transmission channels is divided, each of the nodes having its transmitting wavelength fixed and unique to a node and its receiving wavelength set tunable, and a network controller for centrally controlling time slot allocation repeated for each frame to the nodes, as described in the Abstract.

Specifically, the Office Action asserts that Bader teaches all of the features of the claimed invention except for a secondary network controller that takes over control of the network if the primary network controller fails, wherein each network device is connected to the secondary network controller by a respective secondary network path; at least one predetermined secondary backup network path connecting each network device with the secondary network controller, wherein each predetermined secondary backup network path is blocked by the network controller when a corresponding secondary network path is active; and wherein, when a secondary network path between a network device and the secondary network controller fails, the secondary network controller blocks the inoperable

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secondary network path and switches to one of the predetermined secondary backup network paths. The Office Action further asserts that Tomioka discloses: "if, as shown in FIG. 21, there is provided a backup network controller 9, switching may be made to the backup network controller 9," (lines 51-53 of column 16).

The Office Action then proposes to combine the teachings of Bader with the features of Tomioka. In particular, the Office Action proposes to modify Bader with the backup network controller of Tomioka.

However, it is respectfully submitted that even if it were obvious to somehow combine the teachings of Bader and Tomioka, and to otherwise modify Bader as proposed in the Office Action, such modification of Bader would still fail to teach or suggest the invention of claim 1, as discussed above. That is, the disclosure of Tomioka and the asserted modification of Bader, as proposed in the Office Action, fail to cure the deficiencies noted above with respect to claim 1.

Accordingly, it is respectfully submitted that the applied art, either alone or in combination, fails to teach or suggest the features as set forth in claim 3. Thus, dependent claim 3 defines patentable subject matter based on its dependency on independent claim 1, as well as the additional features the claim recites. Withdrawal of the rejection under 35 U.S.C. §103 is respectfully requested.

E. The Rejection of Claim 4

The Office Action rejects claim 4 under 35 U.S.C. 103(a) as unpatentable over Bader in view of Tomioka, and further in view of Bass. This rejection is respectfully traversed.



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The teachings of Tomioka and Bass, as well as Bader, have been discussed above. It is respectfully submitted that the applied art to Bader, Tomioka and Bass, either alone or in combination, fails to teach or suggest the features as set forth in claim 4. Thus, dependent claim 4 defines patentable subject matter based on its dependency on independent claim 1, as well as the additional features the claim recites. Withdrawal of the rejection under 35 U.S.C. §103 is respectfully requested.

F. The Rejection of Claims 5-7, 9-11, 14, 15, 22-24, 26-28, 31 and 32

The Office Action rejects claims 5-7, 9-11, 14, 15, 22-24, 26-28, 31 and 32 under 35 U.S.C. 103(a) as unpatentable over Bader in view of U.S. Patent 6,373,838 to Law et al. (Law). This rejection is respectfully traversed.

Law teaches a Dial Access Stack Architecture (DASA) that includes a stack of Network Access Servers (NASs) each independently establishing and processing information for communication links on a public telephone network. A primary interconnect couples the stack of network access servers together through a primary network. A routing engine is coupled through the primary interconnect to the stack of network access servers routing packets between the network access servers and an Internet network. A secondary interconnect couples the stack of network access servers together through a secondary network that operates independently of the primary interconnect.

Law further describes that the primary or secondary interconnects each allow pairs of the network access servers to communicate with each other in parallel and independently of the routing engine. The DASA provides scalability and resiliency to fault conditions and can easily

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aggregate and integrate any new access media. Applications such as voice, video and multicasting can be seamlessly added. The DASA architecture can scale from hundreds to thousands of ports at optimal cost and performance while avoiding any single point of failure (Abstract).

In the Office Action, Law is relied upon for various particulars including connection specifics and cable properties, for example. It is respectfully submitted that even if it were obvious to somehow modify Bader as proposed in the Office Action (for example as proposed in paragraph (d) of the Office Action) with regard to the connection specifics and cable properties, such modification of Bader would fail to cure the deficiencies of Bader, as described above.

Accordingly, Applicant submits that the applied art of Bader and Law, either alone or in combination, fails to teach or suggest the features as set forth in claims 1 and 20. Thus, dependent claims 5-7, 9-11, 14, 15, 22-24, 26-28, 31 and 32 define patentable subject matter based on their dependency on independent claims 1 and 20, as well as the additional features such dependent claims recite. Withdrawal of the rejection under 35 U.S.C. §103 is respectfully requested.

G. The Rejection of Claims 8, 12, 25 and 29

The Office Action rejects claims 8, 12, 25 and 29 under 35 U.S.C. 103(a) as unpatentable over Bader in view of Law, and further in view of U.S. Patent 5,521,958 to Selig et al. (Selig). This rejection is respectfully traversed.

Selig is directed to a telecommunication test system. In particular, as described in the Abstract, Selig teaches that a telecommunication test system for a line to be tested includes a test

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measurement device coupling with the line. The test measurement device determines parameter measurement data from the line. A processor receives the parameter measurement data. Selig further teaches that a first communication path between the test measurement device and the processor transmits the parameter measurement data. As referenced in the Office Action, Selig teaches the first communication path is a wireless path.

Selig further describes a mobile facility communicates with the processor. The communications are via a second communication path which includes a primary wireless path and a back-up wireline path. A central office and a data test place various signals on the line being tested. A third communication path between the mobile facility and at least one of the central office and the data test center is provided. The third communication path includes a primary wireless path and a back-up wireline path.

In short, Selig is relied upon in the Office Action for features relating to Selig's wireless connection. It is respectfully submitted that even if Bader, as modified by Law, were somehow modified to utilize Selig's wireless connection, such combination would fail to cure the deficiencies of Bader as discussed above.

It is respectfully submitted that the applied art of Bader, Law and Selig, either alone or in combination, fails to teach or suggest the features as set forth in claims 1 and 20. Thus, dependent claims 8, 12, 25 and 29 define patentable subject matter based on their dependency on independent claims 1 and 20, as well as the additional features the claims recite. Withdrawal of the rejection under 35 U.S.C. §103 is respectfully requested.

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H. The Rejection of Claim 19

The Office Action rejects claim 19 under 35 U.S.C. 103(a) as unpatentable over Bader in view of U.S. Patent 5,864,284 to Sanderson. This rejection is respectfully traversed.

Sanderson relates to coupling radio frequency signals. In particular, Sanderson teaches a coupling system for transferring an RF signal to and from a high-voltage cable of a power distribution system. The coupling system uses a lightning arrester as an element for coupling a RF signal from a RF modem to and from the high-voltage cable. An impedance element of the coupling system is a section of a grounding cable modified with one or more ferrite cores as a means for adjusting the value of the impedance. As referenced and relied upon in the Office Action, Sanderson teaches aspects of a power network or a power grid in column 3, lines 46-49. However, it is submitted that Sanderson fails to cure the deficiencies of Bader, as discussed above.

Accordingly, it is respectfully submitted that the applied art of Bader and Sanderson, either alone or in combination, fails to teach or suggest the features as set forth in claim 1. Thus, dependent claim 19 defines patentable subject matter based on its dependency on independent claim 1, as well as the additional features the claim recites. Withdrawal of the rejection under 35 U.S.C. §103 is respectfully requested.

I. The Rejection of Claims 37, 42 and 43

In the Office Action, claims 37, 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bader in view of Bass, and further in view of Law. This rejection is respectfully traversed.

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The teachings of Bader, Bass and Law have been discussed above. It is respectfully submitted that such applied art to Bader, Law and Bass, either alone or in combination, fails to teach or suggest the features as set forth in claims 33 and 38 for the reasons set forth above. That is, neither Law nor Bass cure the deficiencies as discussed above with respect to Bader. Thus, dependent claims 37, 42 and 43 define patentable subject matter based on their dependency on independent claims 33 and 38, as well as the additional features such dependent claims recite. Withdrawal of the rejection under 35 U.S.C. §103 is respectfully requested

J. Conclusion

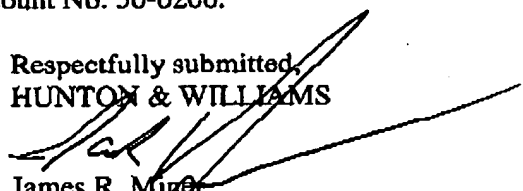
For at least the reasons outlined above, Applicant respectfully asserts that the application is in condition for allowance. Favorable reconsideration and allowance of the claims are respectfully solicited.

Should the Examiner believe anything further is desirable in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number listed below.

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For any fees due in connection with filing this Response the Commissioner is hereby  
authorized to charge the undersigned's Deposit Account No. 50-0206.

Respectfully submitted,  
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